February 12, 2021
Kleinfelder Project No.: 20200528.001A

Costco Wholesale
c/o Mr. Travis Morton, Associate
MG2
1101 Second Avenue, Suite 100
Seattle, Washington 98101

Subject: **Special Inspection Final Letter**
Driven Grout Pile Installation
Costco Wholesale Building 5 – Parking Garage
755 Lake Drive
Issaquah, WA 98027
MG2 CW#15-0035-03
CW17-1048-03
Building Permit No. BLD19-00044
BLD18-00375

Dear Mr. Morton:

This final inspection report summarizes Kleinfelder's observation and documentation of driven grout pile installation at the above referenced address as required by the project plans, specifications, and the International Building Code (IBC). Between May 30 and November 7, 2019, we observed DeWitt Construction install 18-inch diameter driven grout piles to the specified acceptance criteria. Kleinfelder developed acceptance criteria based on pile design loads on the approved structural plans and Pile Driving Analyzer (PDA) results developed by Robert Miner Dynamic Testing, Inc.

Our observations included monitoring and recording the number of blows per foot to advance the steel mandrel during driving, verification that the mandrel was driven to the specified acceptance criteria, the number of pump strokes required to fill the displaced soil column, and the installation of the steel reinforcing cages for each pile. A WABO certified Reinforced Concrete Special Inspector was on site to collect daily samples of the grout and inspect the pile cages prior to installation.

Our work also included materials testing, special inspections, and construction observation of the pile caps, grade beams, and backfill for the buildings foundation system. A WABO certified Reinforced Concrete Special Inspector was on site to perform inspections of the steel reinforcement for the pile caps and grade beams, observe concrete placement and sample concrete or oversee concrete sampling by an ACI certified technician. Concrete cylinders were cast on site from the sampled concrete and allowed to cure before being transported to our Redmond laboratory for compressive strength testing. A technician or inspector was on site to observe placement of structural backfill and perform density testing.

Daily field reports for pile installation observation and foundation element inspection were transmitted to the project team and the City of Issaquah via email on a weekly basis. Additional copies are available upon request. Based on our review of PDA results, field and laboratory testing

KLEINFELDER 14710 NE 87th Street, Suite 100, Redmond, WA 98052 p | 425.636.7900 f | 425.636.7901

inspections and observations it is our professional opinion that the work was performed in accordance with the approved project plans and specifications.

LIMITATIONS

Test results or special inspections and observations reported are those existing at the time of our services and may not be the same or comparable at other times. As our client, please recognize that construction monitoring is a technique employed to reduce risk of problems arising during construction. Provision of construction monitoring by Kleinfelder personnel is not insurance, nor does it guarantee construction of any type. Even with diligent monitoring, some construction defects may have been missed. In all cases, the contractor shall retain sole responsibility for the deficiencies or omissions, regardless of when they are found. We do not undertake the guarantee of construction or production of a completed project conforming to the project plans and specifications.

This work was performed in a manner consistent with the level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions, and at the date the services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

CLOSURE

We trust that this report serves your needs at this time. If you have questions regarding our professional services or need additional information, please contact our office at (425) 636-7900.

Respectfully submitted,

KLEINFELDER, INC.

William R. Rosso, EIT
Professional

Marcus Byers, PE, P.Eng
Principal Geotechnical Engineer
Senior Project Manager

KLEINFELDER 14710 NE 87th Street, Suite 100, Redmond, WA 98052 p | 425.636.7900 f | 425.636.7901